



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

The Wisconsin horticulturist. Vol. III, No. 9 November 1898

Wisconsin State Horticultural Society
[s.l.]: [s.n.], November 1898

<https://digital.library.wisc.edu/1711.dl/LK2CZCWR3LLUK8T>

Based on date of publication, this material is presumed to be in the public domain.

For information on re-use, see
<http://digital.library.wisc.edu/1711.dl/Copyright>

The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.



WISCONSIN.

PLEASE
DO NOT
HANDLE
FRUIT.

WISCONSIN

PLEASE
DO NOT
HANDLE
FRUIT.

PLEASE
DO NOT
HANDLE

Produce of Wisconsin

FR. RINEHART, OMAHA

Page 6.

The Wisconsin Horticulturist.

VOL. III.

NOVEMBER.

NO. 9.

WISCONSIN FRUIT AT OMAHA.

By A. J. Philips, Secretary of the State Horticultural Society.

The details of collecting and arranging our fruit at the Exposition have already been quite fully described by Messrs. Hatch and Toole. Hence I will, for an explanation of the picture which appears as a frontispiece in this issue of the Horticulturist, simply take the exhibit as I found it and as I arranged it for the picture and for the Judge to decide on, and as I left it in charge of President Kellogg, who will report later on.

October first when I entered the Horticultural Hall I found Mr. Toole busy at work, arranging the exhibit to leave in the best possible shape to keep up the reputation it had already established. Though it was the first time I had ever seen him showing fruit at a big fair I soon discovered that his whole soul was in it, the same spirit that takes possession of him when he arranges and displays his beautiful Pansies. He remained several days after I came, part of the time on the Grounds taking in the sights and part of the time assisting the writer to become familiar with the exhibit and acquainted with other exhibitors. He had become so interested in our exhibit that when he bade me good-bye and left for home, as he passed out of the door he gave a parting look back, as much as to say, "I am loth to leave those apples."

About the time I took charge Supt. Taylor brought to me a blank to fill out for the committee on awards, stating in what way we wished the Exhibit passed upon and what

particular points we wished to make prominent. After looking over our own and other exhibits and noticing the admiration of the visitors for our new seedlings, to which I had already made a large addition from my part of the State (they being so much better matured than those first sent), I concluded to make a specialty of the new seedlings of our State, together with the Wealthy and Malinda from our sister state Minnesota, and show the Exposition and its managers what we have accomplished while trying to find and produce varieties hardy enough to stand our trying climate, after we have heard times without number the words "You can't grow apples in Wisconsin." So I went to work.

On the left as you will see I arranged a pyramid of the finest N. W. Greening apples I ever saw, part came from Sauk, part from La Crosse and part from Monroe counties. Being a winter variety, that plate received more words of praise than any other on the table from fruit men. On the extreme right I built a similar pyramid of beautiful McMahan apples which drew more words of praise from the ladies than any other; their first salutation was, "Oh aren't those lovely; they must be sweet." Then near the center in front was a plate of five Wolf River, the aggregate weight of which was near seven pounds. These were much admired and made a fine show. One of the latter was sent by Chas. Hirschinger of Sauk Co. Back of this plate I placed a pyramid of fine specimens of the Avista, the old tree of which has a remarkable history. The original tree bore three barrels this year, being its 31st consecutive crop. This tree furnished apples for the Centennial Exhibit, for the New Orleans Exposition, for the great World's Fair at Chicago, and now for the great Omaha Exhibit. Apples from it have been shown at twenty-eight State Fairs, at thirty winter meetings and thirty-six county fairs, part in Minnesota but mostly in Wisconsin. To the right of this I placed a fine pyramid of Eureka, a sweet seedling planted by my father before the war of 1860; seeds were from the Tallman Sweet. Across the center I had three pyramids of a Red seedling which

has been fruiting for the past three years in Monroe County, Wis. On account of its beautiful size and shape and deep red color it was a great addition to our show, and it was the only seedling in our Exhibit that the Southern fruit men seemed anxious to secure cions of. It appears to be hardy, is of good quality, at least it was so pronounced by fruit men; and, if on trial it proves to be hardy enough for our climate, it will be a valuable addition to our list of commercial apples.

The Newell from Sauk and Richland are to the right of the center and were nice. Back of the McMahan I had a fine pyramid of Malinda produced from grafts four years old. This is a winter variety and the only seedling that stood the winter of '84 in Minnesota without injury, so I am informed. This early bearing, top-worked, is a valuable object lesson to those who discarded that variety because it was so long coming into bearing. Back a short distance on each side, I placed two nice pyramids of Pewaukee from Sauk Co. The Judge, Hon. H. E. Van Deman, former U. S. Pomologist, said those reminded him of pleasant hours he had spent with Uncle Peter Pepper. Knowing that a list of northern seedlings would be incomplete without the Wealthy, I placed a pyramid of them on the left hand corner, well to the front and marked them a Minnesota seedling, not wishing to take any of the honors to our state that belong to Minnesota.

After making this seedling show as attractive and impressive as I could, I left the back part of the tables as Mr. Hatch had them, only taking off those that had begun to decay and replacing them with more attractive kinds. A number of plates of a new seedling called the Morgan, sent from Vernon county, were interspersed among the others. It is red and promises to be a fair keeper. I regretted much in preparing the list for the Judge that I had not some data to tell where different fruits came from. I found some fine Thompson seedlings on the tables, which I judged came from the trial acres, either at Ithaca or Weyauwega. About

the time I left several new seedlings were sent from Waupaca county, such as Ratsburg, Secker and Longfield. Some fine specimens of the Russian Longfield were sent from Mineral Point, Wis. From varieties shown I judge that Sauk county furnished the major part of the Russians, which helped out the show very much. Some thirty-six varieties of grapes from Mr. Fox's vineyard at Baraboo were packed and sent by Prof. Goff. Mr. Toole took great pains to place and arrange them so that they added much to the beauty of the exhibit. I found apples from the Omro society and from Janesville in cold storage and on receiving the list sent by Mr. Babcock and finding they were mostly duplicates of those already on the tables, I left them there for Pres. Kellogg to replenish with as the earlier apples began to fail.

While I was impressed with the beauty and attractiveness of our display, I was also much impressed with the beauty and great commercial value of the displays from other localities, as many were largely, and some wholly, made of red, long keeping, valuable winter varieties. I was also impressed with the possibilities of irrigation by their handsome apples and peaches. Montana and Washington came in late and occupied small space but had some fine apples, our Wisconsin Wolf River being in both shows. One exhibitor, speaking of seedlings, said where he lived they did not bother with them much, as they were content with the old varieties. But when I showed him that two-thirds of his apples were the Wealthy, Peter, Gideon and Martha, seedlings of Minnesota, and the Wolf River, Pewaukee and McMahan, seedlings of Wisconsin, and the McIntosh Red of Canada, he changed his mind.

I was glad to meet and enjoyed visiting with Uncle Wellhouse, called the apple king of Kansas, who has 1640 acres of orchard. For the last ten years he has settled down and planted only five varieties found by him to be the best money makers, viz., the Gano, Ben Davis, Jonathan, Missouri Pippin and York Imperial, the first four of which

I am top-working on the Virginia Crab with good success. But this is getting too long and I must close and write more at some future time.

But I feel that I cannot close without paying a tribute of respect to the memories of the men whose energy, industry, knowledge, perseverance and unselfish manner in which they pushed their work, made it possible for us of the Wisconsin State Horticultural society to make the grand exhibit shown in this picture, which was admired by hundreds of thousands. I refer to Peter Peffer, Wm. A. Springer, E. W. Daniels, S. I. Freeborn and Peter M. Gideon, five men whose life work for the Northwest cannot be estimated by a money value. Of course we have others who have done much to advance Horticulture, but when I looked over our tables the work of these five men came prominently before my eyes. And not only on our tables but on nearly all others in the building; N. W. Greening away from the Pacific coast; Wolf River from Montana, Washington, Oregon, Iowa, Colorado; Pewaukee from Montana, Idaho, Colorado; Wealthy from nearly every state represented, and McMahan, beautiful specimens, from several states. And of the lot who was more energetic and untiring in his efforts than Uncle Daniels? Why, a man from central Iowa came to our table and after admiring the fine show of N. W. Greenings, said, "The most satisfactory trade in apple trees of my life I made with the old man Daniels at a Milwaukee Fair many years ago, on the old Cold Spring Grounds. He had samples of his trees there and was bound to have me try some. I had not much faith in them but finally bought twelve trees to get rid of him, and from those trees two years ago I put sixty bushels of fine apples in my cellar, about all the winter apples I had, and we liked them well."

Who was more unselfish than Uncle Springer? Who was more systematic with his work than the modest S. I. Freeborn? Who was more scientific than Uncle Peffer? And who has done more for the apple growers of the United States than Uncle Gideon? Echo answers, no one. One

incident that impressed me several years ago, shows the tenacity with which men cling to a life work they have loved. I was staying over night on my way to an Institute at Pine River and found that by walking a mile I could see Uncle Daniels, who was very feeble. I called at the house and told my errand. His daughter said, "He will not know you, he is totally blind and can hear but little, but I'll bring him in if you say so." I said, "I want to see him, if he can't see me." Well he came in, reached out his hand, said, "I can't see you but if you will talk loud I may know your voice." I had not spoken a dozen words when he stopped me and said, "Wait a minute till I can think; I know you. Oh! you are Mr. Philips. I sent you some trees and you always said kind words for my tree. I have only six of the apples left on a shelf in the cellar." He told his daughter to bring them and said to me, "Take them to the Institute; they are the last I ever expect to handle. Show them as my last offering, and may God bless you. I know the North Western Greening will make many a man rich and happy." I carried them to six Institutes and showed them and kept them until after his death, which occurred about six weeks later.

One thing more and I close for this time. I only found the McIntosh Red in two exhibits, viz.: Wisconsin and Montana. They were fine and Mr. Van Deman thinks it better in tree and quality than the Fameuse. I consider it worthy of cultivation. Winter apples scarce and high at Omaha.



BITS OF EXPERIENCE WITH APPLES.

Mrs. Franklin Johnson.

What would add more to the interest and usefulness of our little Wisconsin magazine than the actual experiences of men and women in growing fruits and flowers, trees and plants? Let us each in turn take the witness stand and give an account of our methods, our successes, our failures,

—telling “the truth, the whole truth and nothing but the truth.”

We came to Sauk County seventeen years ago, bought an orchard and built a little home in it,—“a nest among the apple-trees.” In the orchard were a few Pewaukee trees. The Pewaukee is a grand apple, beautiful to look upon and of fine flavor. It always sells for a high price. We wanted a good apple and we wanted money, so we set out three hundred Pewaukee apple-trees. In a few years came a succession of “old-fashioned winters.” Result, three hundred dead Pewaukee trees. After solemnly viewing their remains, we cremated them; and we now earnestly advise young people in the interior of the State to refrain from planting a Pewaukee orchard. Disappointment will inevitably follow soon or later. The Pewaukee is a success under the protection of Lake Michigan. Even here in Sauk County I would plant a few trees with the hope that one or two might survive, but I would not depend upon them for financial backing.

The Alexander is another alluring apple, big, red and handsome. If I were raising apples for exhibition purposes I should try to have some Alexanders, even if I had to tie them on to the trees, or glue them on, or stand and hold them on, until they had attained full size. An Alexander apple of ours once took the premium as the biggest apple at the State Fair. We have always felt that it won its laurels by staying on the tree until it grew up,—and it was the only apple that did stay on; the others lost their grip and fell to the ground when about two-thirds grown.

A Wisconsin seedling which “has money in it” for this locality is the Plumb’s Cider. It is an apple of good size, one of the best pie-apples ever grown, and sells well in the markets of the Northwest. The tree is hardy, and such a bearer! Two years ago we picked nine barrels of marketable fruit from one tree. This year we picked seven bar-

rels from another tree. While it is not an eating apple, it is so popular for cooking and its tough skin bears transportation so well that I think he who should plant it for market would find it a good investment. With us the Plumb's Cider keeps, and retains its flavor, until February.

Newell's Winter, or Newell, is a delicious eating apple of Sauk County origin. It is at its best about Christmas time. One winter a lady from Massachusetts, en route for Minneapolis, lingered at our home several weeks in shivering dread of venturing further north. After our supply of Newell was eaten up she went to a store to buy more. The merchant had no Newell but suavely offered her some Baldwins. She politely refused them, then expressed wonder at his shipping in the Baldwin when *so much better an apple* was grown right here.

Baraboo, Wis.



BULBS FOR THE HOUSE.

The bulb which is of easiest culture and is surest to bloom is the Chinese Sacred Lily, provided you procure large, strong bulbs. The small, cheap bulbs will sometimes give no flowers, nothing but leaves. Peel your bulb, that is, remove all the dark skin, then place it in a rather shallow dish, and put into the dish enough pebbles and gravel or coarse sand to hold the bulb firmly in position, so that the roots will not push it out of place when they begin to grow. Fill the dish nearly full of lukewarm water, and set it in a warm, dark closet for a few days, then remove to a sunny window. When the pebbles are put in the dish bits of charcoal should be scattered freely among them to keep the water pure. Add more water when needed to supply the waste from evaporation. My first bulb began to bloom in just three weeks from the time it was placed in the water, but frequently they do not bloom so quickly.

The Roman Hyacinth is very satisfactory as a house plant. Plant two or three bulbs in a six-inch pot, placing the top of the bulb just even with the top of soil, pressing the dirt down well and after watering put the pots away in a cool, dark place for several weeks. A well enriched sandy soil is best, but no fresh manure should be used. It is said that bulbs also do well in Jadoo fibre.

A writer in American Gardening says the pots should be placed in a dark cellar to make roots. "When one has a good cellar for the purpose, it is by far the most satisfactory place. There are cellars and cellars however, and it is well to be sure that the cellar is adapted to the purpose before trusting it too far. A safe rule is that any cellar in which potatoes or Dahlia roots will winter well, is a good one in which to start bulbs. The pots may stand on the shelves, or on the floor in wooden boxes, with sand or ashes thrown over them to exclude the light. If the cellar itself is rather dark, pasteboard boxes make an excellent substitute for the ashes, and are very much neater.

Unless the atmosphere of the cellar is very dry, once in two weeks should be sufficiently often to water the soil, but the bulbs should not be allowed to suffer for water at any time, nor should they be kept too wet at first.

After four, five, or six weeks of seclusion, or whenever the pots are well filled with roots, the bulbs should be brought to the light gradually, and, after a few days, should be given all the sunshine possible, though they will bloom perfectly without it. If they seem backward, sunshine and warm water will hasten them."

The Paper White Narcissus may be grown in the same way, I have been told.



"That," said Maud, as the distinguished stranger entered the room, is the Victoria Cross." "Is it?" inquired Mamie, in a tone of great interest. "How many century runs must you make to get one?"—Washington Star.

ROSES,—FALL AND WINTER TREATMENT.

November is the time to see to it that these pets are made comfortable for the winter, though December will answer.

Some prefer to prune before covering, but many defer pruning until spring. One man treats his Hardy Perennial roses to a cut-back of eighteen inches from the root, then runs boards around them and fills the enclosed space with leaves.

We like to have some of the Hardy Perennial, Moss, and June roses left long and some pruned short. We had General Jacqueminot this year, on their own roots, in full bloom, standing seven feet high without support. When left long and laid down, a sod inverted is the best protection.

G. J. K.

**GRAPES,—PRUNING AND PROTECTION.**

Geo. J. Kellogg.

Editor Wisconsin Horticulturist:—

As soon as the leaves fall grapes may be pruned. Cut off three-fourths of all new wood. On the strongest shoots of the new wood leave two to four buds. This new wood is what bears next year and every bud may be counted for three bunches of fruit, though it will pay always to nip off the third bunch.

After pruning, the vines should be left up exposed to the air ten days to dry or they will bleed in the Spring.

Grapevines must be laid down on the ground. A stake to hold them down is about all the protection the Concord needs; for other kinds inverted sod is better than soft earth. Soft earth is not good for the Rogers varieties, as often the buds become water-soaked and killed.

It is better to prune in November, but any time up to March will answer, if the winter is not too changeable. The most trying time for all half-hardy vines, plants, trees

and shrubs is the hot days of February and March.

The earlier grapevines are tied up, in April, the better, as they then become inured to the cold nights, and if the buds start they stand harder frosts than if left covered until May.

THE POWER TO OBSERVE ESSENTIAL TO A FARM EDUCATION.

At one of the meetings of the State Board of Agriculture of New Jersey, several of the speakers advocated a change in the methods of educating farm children. Their earliest instruction should be from objects rather than from books, with the view of training them to be observing. With young children the chief work of the teacher and parent should be to train natural powers of investigation.

One writer says: "There are very few farmers who have ever learned to see well. They may be shrewd in business and quite able to see a point in trade; they are not able to observe what is going on about them. Buying some honey the other day of a farmer, we discussed the short apple crop. I suggested to him that it was possibly largely due to the premature hatching out of insects that bear pollen from flower to flower, and then their killing off by the cold May. He at once added that his bees fertilized his own orchard of close-set trees, but were unable to fly to other orchards to render similar service. The consequence was that he had a fine crop while others got next to none. This man knew how to see; and what he saw was this—that bees not only make honey, but that they make our apple crop as well. Is it at all likely that a man who can see as well as that will not see a good many other things that his neighbors fail to see?"

Let us consider in how many ways this cultivated observing power may be of advantage. Of course the first point to be generally considered is the financial—not the

highest or most valuable, but first to be looked after. The power to observe well enables a farmer to comprehend the money values of his soil, and his crops, as no one else can. He is sure not to overlook the possibilities under his feet.

I have seen a man beat out of his home on the ground that the soil was too poor to support his family; but his successor, a man of different make-up, found a marl bed and grew rich."

"Trained to keen inquisitive mental action a man feels his power and dignity, and is less liable to waste himself in vicious habits. But, perhaps, best of all, the boy has by this sort of culture learned to love his home. Everything is intensely interesting on the farm. A bug is not a mere insect, and nothing more; but, more than any book ever opened, it is a volume to be studied. Every leaf becomes eloquent to him. The trees are companionable. He understands what he is surrounded by, and for that reason loves the land."

"What then would you do about it? I would for the first seven years of a child's life consider it my sacred duty to open his eyes to Nature. It is a matter of no importance that he shall learn to read before eight. With his first acquisition of letters he should begin a more elaborate study of things on the land and about his home. He should have very little use for books that send his mind roaming over the world. I would begin with the study of soil, plants, bugs, animals—of the home sort. It is far more important that he shall understand the plum curculio than the African lion. But the bottom difficulty with our farmers is that they have never been taught to distinguish one bug from another. In a square fight the bugs beat and destroy our crops and trees. The anthracnose and black rot dealt deadly blows to our grapes and vines before it was possible for the observers to inform the vineyardists what to do. I cannot find one farmer in ten who can tell the codling moth from the tent caterpillar."

"How shall we proceed with our children to secure the end specified? It is a very simple matter if set about persistently. I take my little ones by the hand as soon as they can walk and make it my business to answer questions, and to ask them. "What tree is this, Phil?" "It is e'm," or "it is ash," or "it is cracker-nut," as the case may be. Let him have his own names, which will always be descriptive. Cracker-nut stands for butter-nut, which is our way of describing the same tree. "But why is it e'm"(elm)? "Don't you see, Papa? See, the leaf is rough and the bark is too." But the pear has a shiny leaf, and the bark of the linden is easily distinguished. He will pick out the specific peculiarities. You are teaching him the important habit not only of seeing but of telling, and of afterward being able to recall and define. This plan must be pursued for years, from two or three up to seven years of age. By that time the child has learned to explore, to discover, and very likely to invent. You will be astounded to find how much he sees before you do. He begins to be your teacher.

Remember this, that you can never have a wisely educated child by any possible system of proxy. You cannot turn over all responsibility in the case to other parties. Home education must cover a good share of the best culture of the earliest years.

"But after our own persistent and patient work comes the public school. There we must insist on the same general principle as we have previously applied ourselves. This will not be difficult when the farmers are well waked up to what they need. I venture to believe that it will not take ten years to introduce the study of vegetable and animal life into our common schools for boys and girls of eight to eighteen. These studies are no more difficult than geography and grammar and arithmetic. The same grade of teachers can quite as easily master botany and entomology. But our reliance must be placed on a broadened normal school system. We must refuse with persistence to accept any teachers with picked up educations. An untrained teacher cannot wisely train pupils."

AMERICAN SEED FARMS.

By George E. Walsh.

American seeds for garden and field culture are superior to those of any other country, partly as the result of special cultivation and selection, but more largely as the result of peculiar soil and climate adaptation. Seed growing has developed with marvelous rapidity in this country within recent years, and the industry now ranks among the leading ones of the land. We not only supply the enormous demand for seeds in the United States, but extensive exports of seeds are annually made. At the present rate of progress it is only a question of time when American-grown seeds will be the reliance of the farmers and gardeners of the whole world. Formerly farmers raised their own seeds, and it was a rare thing to purchase from professional seedsmen; but of late years the very reverse has been the case. The reason of this is plain. The professional seedsman can raise and sell the seeds cheaper because everything is done on a large scale, and he can guarantee the finest quality. So many seedsmen are in the business now that competition renders it absolutely necessary to success that superior seeds should be placed upon the market.

The most favorable locations are selected by the seedsmen to grow their seeds; and where certain plants have become famous because of the peculiarity of the soil or climate, there their farms are generally located. For instance, the valley of the Platte River, in Nebraska, is especially favorable to the growing of vine seeds, such as cucumber, melon, and similar plants. Some of the seedsmen contract annually for hundreds of acres of land in that section simply to obtain the finest cucumber, watermelon and muskmelon seeds. Excellent seed peas can be grown in Jefferson County, N. Y., and annually between three and four hundred carloads of seed peas and beans are shipped from that county. Connecticut is famous for her fine onion seeds, and hundreds of acres are devoted entirely to the raising of onion seeds for the markets. Michigan ranks next in order for fine onion

seeds, and large farms are being planted with them for the seed houses. California's climate and soil are peculiarly fitted for the growth of lettuce seed, and she stands now pre-eminent in this respect, driving all other States out of the market. Long Island has long been well known as a great cabbage center, and the cabbages grown there are the finest in the world. The seedsmen have made this place the base of their operations for growing cabbage seeds, although Puget Sound cabbage seeds are rapidly gaining on those from Long Island.

These are but a few of the many localities which are peculiarly adapted to the growth of certain garden and field seeds, and which have been largely occupied by professional seedsmen. The seed houses do not, as a rule, buy the farms, but either lease them for a term of years, or contract with farmers in the immediate neighborhood to grow so many acres of certain kinds of seeds. Many farmers living in seed-growing districts have abandoned all regular farming of crops for the market and have given up their services entirely to the professional seedsmen. There is, consequently, so much competition in this line that the former good profits have been largely reduced. In many cases the farmer does not make any more now in growing seeds than he would in growing corn or wheat, but he is surer of a market and ready money. The seedsmen contract to take the products provided they come up to the test, which is a high one. A seed-growing farmer must, therefore, be an expert, progressive and wide-awake man; for the seedsmen know what they want, and employ experts to look after the testing of seeds.

Nearly all of the large seedsmen have private test grounds where new kinds are constantly being tried, and old ones are being improved. The stocks offered by all of the rival seedsmen are also tested in these trial grounds, and if there is an improvement over their own seeds, the matter is looked into at once. If there is an improvement made in seeds by a rival house, the other seedsmen are prompt to take advantage of it, and have the seeds grown

on their farms the next season. Everything for the seedsmen depends upon the quality of the seeds, their vitality and purity being of special importance. The strong competition makes every seedsman do his utmost to raise the standard of his seeds, and, as a result, we have a great improvement in American grown seeds. European stock, if sold at all in competition with American seeds, must be sold at a considerably lower rate.

The demand for better seeds and plants makes the methods of cultivation on these seed farms a study that would be a benefit to every farmer and gardener. Formerly seed growers simply planted their seeds, and as they came up the poorer specimens were weeded out, and only the finest ones were allowed to mature. But today the pedigree of every plant on a seed farm is known way back, and the whole breeding is carried on as scientifically as the breeding of registered cattle or horses. There are famous stocks to begin with, and the dealers guarantee that all the seeds they place on the market are descendants of not more than the fifth or sixth generation from them. After that the seeds are considered run out. Excellent plants for stocks are constantly searched for. If one is discovered in the fields or trial beds it is transferred to a greenhouse, where it is treated as tenderly as a new-born baby. It is surrounded by everything that will tend to make it grow and improve. It is then increased by cuttings, which are planted another year where they will not be effected by other plants. Several pounds of seeds will be obtained from these plants, and the following year they are sown and cultivated, and a large quantity of the seeds are placed upon the market. To get the seeds from a good plant, consequently, takes several seasons, and then they run only for several years before they are replaced by others. The different strains are bred with great care, and the great number of names given to them by the seedsmen seems a little confusing to the ordinary purchasers.

—The Independent.

FALL CARE OF STRAWBERRIES.

Strawberries are better if covered lightly, say one inch, before the ground freezes, then later another inch, or just so you cannot see the plants or ground. This is particularly for new beds. For covering use nothing which contains foul seeds. Marsh hay is best unless on a very windy location; even then it can be weighted with dirt or brush. Clean straw is good. Bagasse, although heavy, makes a splendid mulch.

For old plantations there is not the same need of mulching or care to avoid weed seed, as the bed should be plowed under after the second crop. If there are any insect pests it is better to take only one crop and then plow under.

Manure mulch may be used for old beds and applied any time before March.

GEO. J. KELLOGG.

Janesville, Wis.

BLACKBERRY CROPS.

No blackberry can be brought to perfection without abundant moisture. This can be secured by keeping the ground full of humus or vegetable matter and then begin cultivation early in the spring and keep it up after every rain. Careful experiments have proven that a loose earth mulch of three inches is best for conservation of moisture. The roots are prone to come near the surface to get the influence of the sun and oxygen of the air, and so if we adopt three inches as the proper depth, great care should be exercised to go no deeper, lest we tear the roots of the plant and deprive them of their feeders and cause them to send up many suckers, which become a nuisance.

The cultivation should continue regularly, at least once a week. When the ground is filled with water in the winter and spring we must not let it get away. Cultivation

does not add any water to the soil, but it prevents the supply from getting away. The water draws to the surface by capillary attraction and film movement, and cultivation, or making the loose earth mulch, destroys these capillary passages and checks the film movement so water cannot rise and must remain below until it is breathed away by the plants.

Now, when the berry pickers tramp through the rows they tread the earth down hard and thus the water rapidly flows to the surface, where it is promptly picked up by the sun and wind and carried off. At this season of the year a drouth usually prevails and the berries dry up, shrinking the number of quarts many times, to say nothing of loss of flavor of fruit, reducing its consumption and price alike.

All this will be prevented largely by having the horse and cultivator ready immediately after the pickers every time the fruit is gathered. Then the last picking will be as large and luscious as the first.

“Winter killing” are not the words to use! We should say “summer killing,” for while the actual killing is done in winter, the cause is effected in summer and is the result of bad cultivation. While we are conserving moisture, as explained, to prevent the berries from drying up, we are preparing them for winter. Everything we can possibly do to force a vigorous growth in the early part of the season should be done and anything which can prevent growth after the first of August should also be done.

If the ground be not cultivated frequently, early, and is packed down by the pickers the growth is suspended in mid-summer, the buds form as if for winter and wood ripens. Later the fall rains come and a new growth starts and this does not have time to ripen and so even slight freezing destroys both wood and bud, whereas, if the wood had been properly ripened it would withstand a very low temperature—lower than we often have.

HOW TO PREVENT FALL GROWTH:—How are we to prevent the fall growth! Having maintained the steady growth until the wood and bud ripening process should begin (about August 1), we sow and cultivate in about four bushels of oats per acre. These promptly germinate and appropriate the plant food and moisture, cutting short the supply of the bushes and their growth will be materially checked and, as the ground is kept cool by the shade, the late growth is quite sure to be avoided, but the value of the oats is not ended here by any means.

They remain green until quite heavy freezing, and then stay as a mulch, protecting the roots from evil effects of freezing and thawing, preventing soil washing during the winter. In the spring they are decayed so as to be easily cultivated into the soil, adding very largely to the surface humus, which separates the soil grains so capillary action is sluggish and a crust will not form so readily and thus the frequency of cultivation be greatly reduced. It is especially important that the suckers which come up shall be treated as weeds and that the bushes be confined to the original plant, so that the entire surface soil shall be stirred by the cultivator. This narrow row not only aids in conserving moisture, but it facilitates picking the fruit, as it is on the outside largely. It is difficult to induce the boys and girls to thrust their arms to the center of a wide, thorny blackberry row, and so much of the fruit is lost.

Overbearing and pollen exhaustion are also among the factors which soon destroy the life of the blackberry. Judicious pruning is the remedy. Let the bushes bear all they can bring to perfection, but not more. They never fail to set several times as much fruit as they can mature. A patch treated as indicated will carry through more buds than under less intensive culture, and so need not be pruned quite so close, but it is always better to overdo pruning than to leave too many buds.

R. M. KELLOGG, in *Western Fruit Grower*.

BLACKBERRIES—HOW TO GROW THEM SUCCESSFULLY AND MARKET THEM PROFITABLY.

In dealing with the above subject I shall confine my remarks strictly to facts based upon *actual personal experience*. Like all other small fruits, the cultivation of the blackberry depends first upon the character and preparation of the soil, and, second, upon its subsequent treatment.

The soil should be plowed deep, subsoiled, and thoroughly prepared; but unlike the raspberry, it does best on rather light soil, and in sunny exposures. Moist heavy land in which the raspberry luxuriates produces a rank growth of canes, that the fall of the year finds green, immature and subject to winter kill. Moderately fertile, warm, well drained (but not dry) land is the best. The blackberry for best results does not require the fertility that the raspberry does. Its inclination is to grow too rank, at best, and its needs are mellowness, rather than richness of soil, therefore extra care should be taken in the preparation of the soil, by deep plowing and thoroughly loosening the subsoil.

PLANTING:—The blackberry, like the raspberry plant, should always be set while in a dormant condition. The ground should be furrowed out five or six inches deep and eight feet apart. Set the plants three feet apart with the horizontal root lengthwise with the furrow; cover up the furrow level with the surface. If the ground is very poor scatter along the furrows before planting a liberal amount of muck or well rotted manure.

CULTIVATION:—Success with the blackberry depends a great deal more upon proper management than culture. All the cultivation necessary is to keep them clean by frequent stirring of the soil with cultivator and hoe. They should be cultivated shallow at all times. More good can be accomplished at the proper time, in pruning, with the thumb and finger, than with all the modern pruning implements ever invented. When the young shoots get to be from three

to three and a half feet high, pinch out the top, leave at least one and a half feet of space between the canes in the row; treat all other suckers as weeds. This summer top pruning will force the canes to throw out laterals and grow in a bush form. Do no more pruning until the spring of the year, when just before the new growth starts, take the pruning shears and clip off all laterals to from four to six buds to the branch. After fruiting season is over remove all old canes, to give you a chance to properly care for the new ones for the next year's crop.

A blackberry patch can be made a "thing of beauty" as well as profit, instead of a "wilderness and nuisance," as it is too frequently the case.

MARKETING:—As to marketing the fruit I will confine myself to a few axioms, for brevity's sake. It is not conclusive evidence that a blackberry is ripe because it is black. They should never be picked for at least forty-eight hours after turning black. They should never be gathered while they are wet either with rain or dew; always pick them when perfectly dry. Market them exclusively in shallow pint boxes. Get them to market always the same day and as soon after they are picked as possible.

—Strawberry Culturist.

*
'MISSED.

"And I miss you more in autumn, when in rustling corn-
fields yellow,
Reapers sing their lays of gladness, when the plovers
loudly call,
When the woods are gold emblazoned and the apple or-
chards mellow
And the bramble red and purple where the ripened ber-
ries fall."

PREPARING SOD LANDS FOR FRUIT.

It is not desirable to set small fruits directly after a tough old sod. You should use one or two cleaning crops, that is, crops that will receive careful cultivation, before you set out fruits. Such sod may be plowed this Fall, leaving the furrows standing up as straight as possible. The frost and air will destroy a good many of the grass and weed roots, and also help to break up the soil. In the Spring cross-plow or work up the sod with a tool like the Cutaway harrow; then plant either corn or potatoes in hills, using what manure or fertilizer you can afford, and giving constant culture, so as to keep the weeds subdued. At the last cultivation of the corn, we would sow 12 pounds per acre of Crimson clover. If this makes a fair growth, which is likely, plow it under the next year, and either repeat the crop or set out small fruits as seems most desirable.

—Rural New Yorker.

**WRAPPING FRUIT IN TISSUE PAPER.**

There is nothing very mysterious about the success of the California fruit growers. In the first place, they take pains to produce high grade fruit; then they fix it up in the nicest packages they can devise, and wrap every pear, every peach, every fruit except cherries, in tissue paper, some even having their brand printed on the tissue paper. And this fruit they send, and capture the fancy market. The way to beat California is to beat her at her own game. If it pays them to buy tissue paper and wrap their fruit it will pay you. It won't cost very much to send a box or two to market and see the difference in price. I don't care if you charge double price for the tissue paper and wrapping, and so on. Charge everything to the expense of the venture that you like, that your conscience will permit, and then make an estimate after you are all through. Fruit which is wrapped is of better quality. The wrapping retains the flavor. Why do the Florida people wrap their oranges? They

wrap oranges with skins as thick as sole leather, because it retains the aroma. With a pear, the longer that fragrance escapes the poorer it is. The peach, pear or plum that is wrapped is better than if not wrapped.—Ranch and Range.

THE SAN JOSE SCALE.

We fear our readers may become tired of seeing this heading in the various farm papers, but we assure them there is reason for a frequent mention of this pest. We know that some men that have orchard stock to sell are trying to belittle the danger, but the danger exists in spite of their efforts to lull the country into a fancied security. The state entomologist of California says that without doubt the San Jose scale is the greatest pest that has ever menaced the orchards of this country. In California it has become so prevalent that it is no longer considered possible to eradicate it. The only thing left to do is to fight it in every orchard and try to grow fruit in spite of it. Spraying has only the effect of keeping down the generations of young ones when they make their appearance on the orchard trees in large numbers. But in the forests where the scale has got a foothold no spraying that will be effective can be done. This should stimulate the horticulturists east of the Rocky mountains to do what they can to prevent the spread of the scale, knowing as we do that once the pest is among our wild trees it will be impossible of extinction. Every state should take energetic measures to protect its borders. We raise troops and spend millions to keep out foreign invaders when they come in the form of men. Why not spend money as freely when it is necessary to repel an insect invasion?

—Farmers' Review.

In nearly all the talk about farming I hear only about the payment in cash. It is quite as important to get the payment of happiness.

WOLVES IN SHEEP'S CLOTHING.

Under such attractive names as "Freezine," "Preservative Compound," etc., various preparations containing formalin, salicylic acid or similar substances are being sold. These "preservatives" are represented as harmless and many people are using them innocently. Salicylic acid and some products of formalin may be useful occasionally as medicines when prescribed by a skillful physician, but they are slow poisons and their continued use in food is dangerous. Throw away your canned fruit if put up with a "preservative;" and be thankful that the laws of Wisconsin seek to protect consumers of milk and cream from all such poisons.

We are glad that the agricultural press is raising a cry of alarm. Witness the following clipped from exchanges: "A milkman in Milwaukee has been fined \$75 for using the substance known as Freezine, in milk. It is said that this substance has the same effect upon milk as freezing, hence the name. The compound keeps milk, not by freezing, but by poisoning the bacteria. What may poison bacteria, may poison babies, who are nothing but human bacteria, anyway."

**WARNING AGAINST PRESERVATIVES.**

"E. O. Grosvenor, dairy and food commissioner of Michigan, sends out the following:

We desire to caution dairymen and dealers in milk against the use in their products of the so-called preservatives now upon the market. Many of these mixtures are decidedly dangerous, and the steady absorption of the same, especially by invalids and children, who are generally large consumers of milk, is likely to produce serious if not fatal effects. Aside from the directly injurious character of some of these preservatives, they all tend to retard fermentation, thus at least indirectly preventing digestion. Science has demonstrated that the value of all food depends very

much upon the readiness with which it is assimilated in the process of digestion and scientific authorities agree that whatever prevents decomposition delays digestion. There are legitimate methods of preservation which do not involve the use of noxious drugs and the department will prosecute dealers in milk found using these deleterious mixtures."



HYDROCYANIC ACID AS AN INSECTICIDE—A WARNING.

TO THE EDITOR OF AMERICAN GARDENING:

I have been interested in reading Dr. Fisher's communication in the last issue of American Gardening on the subject of hydrocyanic acid gas as an insecticide; but think a more serious word of warning should be uttered to your readers in regard to its use than was given in your editorial.

At Willowmead Gardens, we have made probably the most thorough experimentation with this gas, as well as with other insect poisons that have been in glass structures, the commercial necessity of overcoming various forms of insect pests injurious to the contents of our orchid houses being the incentive of the elaborate experimentation. It is true that hydrocyanic acid gas will kill every form of life, animal as well as vegetable, if it is used of sufficient strength and for a long enough time; but there are some insect forms that will not succumb to it unless a sufficiently strong solution of gas is used to have a caustic effect on plants of various kinds. This effect does not at once show itself.

One trouble of the long immersion of plants in even a dilute solution of the gas is that too much is absorbed by the plants and more or less injury to the plants is effected. Plants show remarkably different susceptibilities to its effects; some of the apparently toughest plants being most susceptible. Furthermore, the gas sometimes "banks" up in certain parts of the house.

But outside of this, the use of the gas as prepared by this process is too frightfully dangerous to warrant it being

handled by any but the most skilled hands. Even with an exceptionable degree of knowledge of general chemistry, and with a special knowledge of the physiological action of poisons, and using the utmost possible personal care in my methods, I have had several narrow escapes in my experimenting. In inexpert hands, the danger is vastly increased. A little of the dust from the cyanide powder, if inhaled direct in using it, or if it get on the hands or clothing, may result seriously. A moderate whiff of the gas if incautiously inhaled stuns one like as if it were a severe blow in the face by a club. Amounts of the gas dangerous to breathe may be inhaled without directly noticeable effect to dull, or even ordinary, perception, the first perceptible effect being a dizziness in the head followed by a slight peach-pit like flavor at the back of the nose and mouth in the upper pharynx. So very diffusive is the gas that one long breath of a very dilute solution may thus be perceived at the back of the mouth fifteen hours after inhalation. I have been made very dizzy by a quick walk of 25 feet to the ventilating apparatus in a house at 9 A. M. in which the gas had been generated at 5 o'clock the previous afternoon. One is liable to be burned by the handling of the sulphuric acid alone, as well as suffer danger to clothing, adjacent plants and structures, during the generation of the gas, or the subsequent clearing up after the process. The whole method is dangerous, inconvenient and entirely too costly for general use.

Formalin gas is safer and as effective both as an insecticide and as a disinfectant. It, too, is caustic in its effects on plants; but is a splendid disinfectant for empty houses, and can be used without danger for that purpose. It may be of interest for your readers to know that as a result of our experimentation at Willowmead Gardens, we have produced an insecticidal agent that apparently is as effective as hydrocyanic acid gas in destroying all insect life, that can be used without danger; and so far as we have gone seems to be non-injurious to plants. Its cost is, however, as great as that of hydrocyanic acid gas. Further ex-

perimentation is now going on that promises to result favorably in producing an agency for insecticidal purposes that will be inexpensive as well as effective, convenient and safe.

J. M. W. KITCHEN, M. D.

East Orange, N. J.

CONVENTION OF HORTICULTURISTS.

The convention season is at hand, and a few words on the subject will not be out of place. To those that attend the manner of conducting such conventions is of prime importance. When people go a long distance to attend such assemblies they usually do it for the purpose of learning new things and better methods. This fact should be constantly in the minds of the officers. It too often occurs that a very large part of the time is taken up with routine work and in discussions that are not instructive. We have seen some unimportant amendment to the constitution consume the entire time of a session; we have seen a "fight" over officers take up another session; we have seen the vindication of some officer become the principal topic in another session. We have attended conventions that were very profitable by reason of good papers and good discussions on horticultural subjects. We have attended other conventions that appeared more of a farce than anything else. From such conventions we have gone away painfully impressed with the idea that the people that had been to the expense of coming from a distance would probably not do so again. The presiding officer holds the situation largely in his hands. If he be inert the work of the convention will lag, and foreign topics will be allowed to consume the precious hours. If he be energetic and understand his business, the speakers and those engaged in the discussions will be held to the topics before the convention, and much will be accomplished. Every presiding officer would do well to study up on parliamentary law.

—Farmers' Review.

ANNUAL MEETINGS OF HORTICULTURAL SOCIETIES.

The Missouri State Horticultural Society will meet Dec. 6, 7, and 8, 1898, at Columbia, Mo., the seat of the State University and Experiment Station.

L. A. GOODMAN, Secretary,

 Westport, Mo.

Illinois State Horticultural Society will hold its annual meeting at Springfield, Dec. 27, 28, and 29, 1898. For information as to premiums and other matters connected with the society, write the secretary, L. R. Bryant, Princeton, Ill.

Southeastern Iowa Horticultural Society meets at Washington, Iowa, Dec. 6, 7, and 8, 1898.

C. W. BARTON, Secretary,

 Cedar Rapids, Iowa.

The Kansas State Horticultural Society will hold its Thirty-second Annual Meeting in its rooms in the State Capitol at Topeka, on the 27th, 28th, and 29th of December, 1898.

WILLIAM H. BARNES, Secy,

 Topeka, Kans.

**THE OMRO CHRYSANTHEMUM SHOW.**

The Fourth Annual Chrysanthemum Show and Fair of the Omro Horticultural Society was to be held in the Masonic Hall at Omro, Nov. 16, 17, and 18, 1898.

We greatly regret that this notice and their beautiful premium list, bound in green and gold, did not reach us in time for our October issue. And we still more regret the "cruel fate" which prevented our attending the show. We hope for a good account of it in our next.



The Atchison Globe notices that there are some men who can't take home a beefsteak without believing they are making their wife a present.

SHORT COURSE IN AGRICULTURE.

The short course in agriculture will begin this year Nov. 29. Many improvements have been made the past year that will add much to the efficiency of the course. A dairy herd has been purchased and fattening stock will soon be bought, which will be used during the winter largely for instructional purposes. The live stock interests of the state are of such importance that special stress will be placed upon that line of work, and students will have an opportunity to become intelligent feeders and breeders of farm animals.

The work in all departments will be especially interesting and instructive. The college is supported jointly by the State and the United States, therefore the residents of Wisconsin pay no tuition, and those from other states only a nominal non-resident fee, thus bringing the benefits of the college within reach of all. At the present writing 172 applications for admission to the short course have been filed. There is room in the college for more and all who contemplate attending should apply for admission to R. A. Moore, Madison, Wis.

TO KEEP LEMONS FRESH.

Some time since I saw directions for keeping lemons indefinitely and think it valuable enough for the Wisconsin Horticulturist. It was simply to put them under an inverted goblet. On July 12th, 1895, I put two lemons in separate glass jars. One was a jar intended for jelly and had a glass cover that set loosely on top. The other was a jar with a ground glass stopper. The former was kept in the pantry opening out of the kitchen and the latter in a cupboard in the dining room. They were examined from time to time and up to December seemed to keep equally well, when the one in the pantry froze and soon after showed signs of molding. On the 25th of Jan., 1896, the other one was cut open and proved to be as fresh as to appearance, odor and taste as when first put away.

E. G. B.

EDITORIAL NOTES.

Don't fail to keep Thanksgiving Day.

Our folks look like the defeated party in a foot-ball game, but they have only been laying down blackberries.

We had strawberry short-cake for supper the first day of November. The berries came from the fruit-farm of Wm. Rounds. Their strawberry bed has blossomed quite profusely this Fall, and has ripened several quarts of fruit. The varieties which are fruiting are Warfield and Enhance.

W. L. Ames and wife of Oregon, Wis., are among the Horticulturist readers who visited the Omaha Exposition.

Mrs. A. J. Philips of West Salem accompanied her husband, Secretary Philips, on his trip to Omaha.

"Our Horticultural Visitor" now has two offices of publication, one at the old stand, Kinmundy, Ill., and one at Grand Rapids, Mich. Communications should be addressed to the home office, Kinmundy, Ill.

A. G. Tuttle brought us some winter apples the other day which our friends all pronounce "little beauties." They are of a dark cream color, deeply flushed with carmine at the stem end. Being genuine winter apples they are hard now, but we ventured to taste one and found the flavor deliciously rich and spicy, somewhat like Newell Winter—much better than Golden Russet. A Mr. Mueller from Prussia, visiting Mr. Tuttle's orchard, recognized the apple as a Russian variety which is a great favorite in Germany, and is a very late keeper. With Mr. Tuttle it keeps until April. The name is Borsdorf.

One day in late October we met Hon. John M. True of Baraboo just returning from the Omaha Exposition. He spoke a good word for the Wisconsin fruit exhibit, then in charge of Mr. R. J. Coe, Treasurer of the State Society.

In the question department of American Gardening we find the following question and answer:

FRUITS FOR WISCONSIN.—What large fruits, such as

apples, pears, plums, etc., can be recommended as "hardy" for latitude 46 degrees south? State of Wisconsin, central part.—C. F. C.

Ans:—Some of the hardiest apples are Tetofsky, Yellow Transparent, Red Astrachan, early varieties; and Duchess of Oldenburg, Alexander, Red Beitigheimer, medium early. Good later varieties are Wealthy, Fameuse (or Snow), Ben Davis, Northwestern Greening, Northern Spy, Baldwin, Winesap, Wolf River, Ontario and others. Most crab apples are perfectly hardy, Hyslop, Transcendent, and Siberian crabs are the varieties usually grown, and all are good. Some of the hardiest pears are the Bartlett, Wilder, Lawson, Flemish Beauty, Angouleme, and Seckel. Good hardy plums are the Bradshaw, Pond Seedling, Lombard, French and Shropshire Damsons, Imperial Green Gage, and Yellow Gage.

Think of recommending Baldwin and Northern Spy apples and the Bartlett pear for planting in central Wisconsin!

This shows that we do need a magazine of our very own. Support the Wisconsin Horticulturist by helping to increase its subscription list. Add to its interest and usefulness by sending to it personal news items and your experience along horticultural lines. This means YOU.

The Wisconsin Horticulturist is only fifty cents per year. It will make a good Christmas present for you to give a friend. See business notice on first inside page of cover.

WISCONSIN STATE HORTICULTURAL SOCIETY.

Officers for 1898.

L. G. KELLOGG, President.....	Ripon
FRANKLIN JOHNSON, Vice-President.....	Baraboo
A. J. PHILIPS, Secretary.....	West Salem
R. J. COE, Treasurer.....	Ft. Atkinson
WALTER J. MOYLE, Corresponding Sec'y.....	Madison
PROF. E. S. GOFF, Wis. Agricultural Exp. Station.....	Madison

Vredenburg & Company,

Printers, Rochester, N. Y.
Lithographers,
Engravers,
Binders,

❁ **FOR NURSERYMEN.** ❁

NURSERY Catalogues, Price-Lists,
Stock Forms, Etc.

Send for Price-List of Supplies.

Lithograph, Hand-Made, Photograph and New
Process Fruit and Flower Plates.

❁ **SAVE** 10 to 50 per cent. by placing your
orders for Envelopes with us.

Colored Fruits and Flowers

FOR Catalogues,
Plate Books,
Circulars,
Cards.

VREDENBURG & COMPANY,

ROCHESTER, N. Y.

Note—Frontispiece of Sept. issue of this Journal illustrates
our "NEW PROCESS" plates.

